

Title (en)

ELECTRIC RESISTANCE WELDED STEEL PIPE FOR OIL WELL

Title (de)

WIDERSTANDSGESCHWEISSTES STAHLROHR FÜR EIN ÖLBOHRUNG

Title (fr)

TUYAU EN ACIER SOUDÉ PAR RÉSISTANCE ÉLECTRIQUE POUR PUITS DE PÉTROLE

Publication

EP 3050990 B1 20181114 (EN)

Application

EP 14875170 A 20141211

Priority

- JP 2013267314 A 20131225
- JP 2014082898 W 20141211

Abstract (en)

[origin: EP3050990A1] An electric resistance welded steel pipe for an oil well, including in terms of mass%: 0.02 to 0.14% of C, 0.05 to 0.50% of Si, 1.0 to 2.1% of Mn, 0.020% or less of P, 0.010% or less of S, 0.010 to 0.100% of Nb, 0.010 to 0.050% of Ti, 0.010 to 0.100% of Al, and 0.0100% or less of N, wherein the contents of Cu, Ni, Cr, Mo, V, and B are 0 to 0.50% of Cu, 0 to 1.00% of Ni, 0 to 0.50% of Cr, 0 to 0.30% of Mo, 0 to 0.10% of V, and 0 to 0.0030% of B, respectively, a remainder consisting of Fe and unavoidable impurities, and wherein in a case in which a full thickness specimen is subjected to a pipe axis direction tensile test, a tensile strength is 780 MPa or more, the ratio of a 0.2% proof stress to the tensile strength [0.2% proof stress/tensile strength] is 0.80 or more, and the ratio of a 2% flow stress to the tensile strength [2% flow stress/tensile strength] is from 0.85 to 0.98.

IPC 8 full level

B21C 37/08 (2006.01); **B21D 3/02** (2006.01); **B23K 13/00** (2006.01); **C21D 8/10** (2006.01); **C21D 9/08** (2006.01); **C21D 9/50** (2006.01); **C22C 38/02** (2006.01); **C22C 38/04** (2006.01); **C22C 38/06** (2006.01); **C22C 38/08** (2006.01); **C22C 38/12** (2006.01); **C22C 38/14** (2006.01); **C22C 38/42** (2006.01); **C22C 38/44** (2006.01); **C22C 38/48** (2006.01); **C22C 38/50** (2006.01); **C22C 38/54** (2006.01); **C22C 38/58** (2006.01)

CPC (source: EP KR US)

B23K 11/00 (2013.01 - US); **B23K 11/0873** (2013.01 - EP US); **B23K 13/00** (2013.01 - EP US); **C21D 8/10** (2013.01 - EP US); **C21D 8/105** (2013.01 - EP US); **C21D 9/08** (2013.01 - EP KR US); **C21D 9/50** (2013.01 - EP US); **C21D 9/505** (2013.01 - EP US); **C22C 38/00** (2013.01 - KR US); **C22C 38/001** (2013.01 - EP US); **C22C 38/002** (2013.01 - EP US); **C22C 38/02** (2013.01 - EP KR US); **C22C 38/04** (2013.01 - EP KR US); **C22C 38/06** (2013.01 - EP KR US); **C22C 38/08** (2013.01 - EP KR US); **C22C 38/12** (2013.01 - EP KR US); **C22C 38/14** (2013.01 - EP KR US); **C22C 38/16** (2013.01 - KR); **C22C 38/18** (2013.01 - KR); **C22C 38/20** (2013.01 - KR US); **C22C 38/24** (2013.01 - US); **C22C 38/28** (2013.01 - US); **C22C 38/42** (2013.01 - EP US); **C22C 38/44** (2013.01 - EP US); **C22C 38/48** (2013.01 - EP US); **C22C 38/50** (2013.01 - EP US); **C22C 38/54** (2013.01 - EP US); **C22C 38/58** (2013.01 - EP US); **C22C 38/60** (2013.01 - EP US); **B21C 37/08** (2013.01 - EP US); **B23K 2101/10** (2018.07 - EP US); **B23K 2103/04** (2018.07 - EP US)

Cited by

EP3521475A4; US11028456B2; US11772367B2; WO2020044061A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 3050990 A1 20160803; **EP 3050990 A4 20170614**; **EP 3050990 B1 20181114**; CN 105555983 A 20160504; CN 105555983 B 20180109; JP 5765509 B1 20150819; JP WO2015098556 A1 20170323; KR 101846103 B1 20180405; KR 20160048153 A 20160503; US 10196702 B2 20190205; US 2016230241 A1 20160811; WO 2015098556 A1 20150702

DOCDB simple family (application)

EP 14875170 A 20141211; CN 201480050973 A 20141211; JP 2014082898 W 20141211; JP 2015515346 A 20141211; KR 20167007940 A 20141211; US 201415023564 A 20141211